

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

Date Dec. 18, 2002

Edwards & Angell, LLP
101 Federal Street
Boston, MA 02110
Telephone: 617-429-4444
Facsimile: 617-439-4170

By Cara Z. Lowen

Cara Z. Lowen
Attorney for Applicant
Registration No. 38,227

Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge Deposit Account No.04-1105 for any such fees; and applicants hereby petition for any needed extension of time.

BOS2_321286.1

MARKED UP VERSION ATTACHED TO AMENDMENT IN

SERIAL NO. 09/207,168

Marked up version of the paragraph starting at page 13, lines 412 is below:

The present invention further provides:

(35) A peptide as defined in claim 1 which comprises an amino acid sequence of the formula

X¹-X²-Asn-Phe-Phe-Trp-Lys-Thr-Phe-X³-Ser-X⁴ (SEQ ID NO:115) (I)

wherein X¹ represents Asp-Arg-Met-Pro-Cys (SEQ ID NO:116),

Arg-Met-Pro-Cys (SEQ ID NO:117), Met-Pro-Cys, Pro-Cys or Cys, X² represents Arg or Lys, X³ represents Ser or Thr, and X⁴ represents Cys-Lys or Cys (except for the amino acid sequence (SEQ ID NO:118) in which X¹ is Pro-Cys, X² is Lys, X³ is Ser and X⁴ is Cys-Lys);

Marked up version of the paragraph starting at page 21, line 22 to page 22, line 5 is below:

Preferred as the peptide of the present invention are, for example, peptides comprising an amino acid sequence of the formula

X¹-X²-Asn-Phe-Phe-Trp-Lys-Thr-Phe-X³-Ser-X⁴ (SEQ ID NO:115) (I)

wherein X¹ represents Asp-Arg-Met-Pro-Cys (SEQ ID NO:116),

Arg-Met-Pro-Cys (SEQ ID NO:117), Met-Pro-Cys, Pro-Cys or Cys, X² represents Arg or Lys, X³ represents Ser or Thr and X⁴ represents Cys-Lys or Cys (except for the amino acid sequence (SEQ ID NO:118) in which X¹ is Pro-Cys, X² is Lys, X³ is Ser and X⁴ is Cys-Lys).

Marked up version of the paragraph starting at page 22, lines 12-15 is

below:

(2) A peptide comprising an amino acid sequence (SEQ ID NO:3) derived from the amino acid sequence defined under SEQ ID NO:1 by deletion of four amino acids (Asp-Arg-Met-Pro) (SEQ ID NO:117) from the N terminus thereof (hereinafter sometimes abbreviated as hCS-13);

Marked up version of the paragraph starting at page 23, lines 15 is

below:

(5) A peptide comprising an amino acid sequence (SEQ ID NO:37) derived from the amino acid sequence defined under SEQ ID NO:1 by deletion of four amino acids (Asp-Arg-Met-Pro) (SEQ ID NO:117) from the N terminus thereof and one amino acid (Lys) from the C terminus thereof (hereinafter sometimes abbreviated as des Lys¹³ -hCS-13);

Marked up version of the paragraph starting at page 23, lines 15-19 is

below:

(8) A peptide comprising an amino acid sequence (SEQ ID NO:40) derived from the amino acid sequence defined under SEQ ID NO:1 by deletion of four amino acids (Asp-Arg-Met-Pro) (SEQ ID NO:117) from the N terminus thereof and substitution of Lys for the 2nd residue Arg (hereinafter sometimes abbreviated as [Lys²]hCS-13);

Marked up version of the paragraph starting at page 24, lines 712 is

below:

(11) A peptide comprising an amino acid sequence (SEQ ID NO:43) derived from the amino acid sequence defined under SEQ ID NO:1 by deletion of four amino acids (Asp-Arg-Met-Pro) (SEQ ID NO:117) from the N terminus thereof and one amino acid (Lys) from the C terminus thereof and substitution of Lys for the 2nd residue Arg (hereinafter sometimes abbreviated as des Lys¹³-[Lys²]hCS-13);

Marked up version of the paragraph starting at page 24, line 22 to page

25, line 2 is below:

(14) A peptide comprising an amino acid sequence (SEQ ID NO:46) derived from the amino acid sequence defined under SEQ ID NO:1 by deletion of four amino acids (Asp-Arg-Met-Pro) (SEQ ID NO:117) from the N terminus thereof and substitution of Thr for the 10th residue Ser (hereinafter sometimes referred to as [Thr¹⁰]hCS-13);

Marked up version of the paragraph starting at page 25, lines 14-19 is

below:

(17) A peptide comprising an amino acid sequence (SEQ ID NO:49) derived from the amino acid sequence defined under SEQ ID NO:1 by deletion of four amino acids (Asp-Arg-Met-Pro) (SEQ ID NO:117) from the N terminus thereof and the amino acid (Lys) from the C terminus thereof and substitution of Thr for the 10th residue Ser (hereinafter sometimes referred to as des Lys¹³-[Thr¹⁰]hCS-13);

Marked up version of the paragraph starting at page 26, lines 712 is

b low:

(20) A peptide comprising an amino acid sequence (SEQ ID NO:52) derived from the amino acid sequence defined under SEQ ID NO:1 by deletion of four amino acids (Asp-Arg-Met-Pro) (SEQ ID NO:117) from the N terminus thereof and substitution of Lys for the 2nd residue Arg and of Thr for the 10th residue Ser (hereinafter sometimes referred to as [Lys²,Thr¹⁰]hCS-13);

Marked up version of the paragraph starting at page 27, lines 17 is

below:

(23) A peptide comprising an amino acid sequence (SEQ ID NO:55) derived from the amino acid sequence defined under SEQ ID NO:1 by deletion of four amino acids (Asp-Arg-Met-Pro) (SEQ ID NO:117) from the N terminus thereof and one amino acid (Lys) from the C terminus thereof and substitution of Lys for the 2nd residue Arg and of Thr for the 10th residue Ser (hereinafter sometimes referred to as des Lys¹³-[Lys²,Thr¹⁰]hCS-13); etc.

Marked up version of the paragraph starting at page 120, lines 16 is

below:

[SEQ ID NO:3]

The amino acid sequence of a peptide derived from the mature peptide defined under SEQ ID NO:1 by deletion of four amino acids (Asp-Arg-Met-Pro) (SEQ ID NO:117) from the N terminus thereof (from the 93[st]rd residue to the 105th residue in the amino acid sequence shown in Fig. 2; hCS-13).

Marked up version of the paragraph starting at page 125, line 23, to page 126, line 4 is below:

[SEQ ID NO:37]

The amino acid sequence of a peptide derived from the peptide having the amino acid sequence defined under SEQ ID NO:1 by deletion of four amino acids (Asp-Arg-Met-Pro) (SEQ ID NO:117) from the N terminus thereof and of one amino acid (Lys) from the C terminus thereof (des Lys¹³ hCS-13).

Marked up version of the paragraph starting at page 126, lines 1418 is

below:

[SEQ ID NO:40]

The amino acid sequence of a peptide derived from the peptide having the amino acid sequence defined under SEQ ID NO:1 by deletion of four amino acids (Asp-Arg-Met-Pro) (SEQ ID NO:117) from the N terminus thereof and substitution of Lys for the 2nd residue Arg ([Lys²] hCS-13).

Marked up version of the paragraph starting at page 127, lines 6-11 is

below:

[SEQ ID NO:43]

The amino acid sequence of a peptide derived from the peptide having the amino acid sequence defined under SEQ ID NO:1 by deletion of four amino acids (Asp-Arg-Met-Pro) (SEQ ID NO:117) from the N terminus thereof and one amino acid (Lys) from the C terminus thereof and substitution of Lys for the 2nd residue Arg (des Lys¹³ [Lys²] hCS-13).

Marked up version of the paragraph starting at page 127, line 28 to page 128, line 1 is below:

[SEQ ID NO:46]

The amino acid sequence of a peptide derived from the peptide having the amino acid sequence defined under SEQ ID NO:1 by deletion of four amino acids (Asp-Arg-Met-Pro) (SEQ ID NO:117) from the N terminus thereof and substitution of Thr for the 10th residue Ser ([Thr¹⁰]hCS-13).

Marked up version of the paragraph starting at page 128, lines 13-18 is

below:

[SEQ ID NO:49]

The amino acid sequence of a peptide derived from the peptide having the amino acid sequence defined under SEQ ID NO:1 by deletion of four amino acids (Asp-Arg-Met-Pro) (SEQ ID NO:117) from the N terminus thereof and one amino acid (Lys) from the C terminus thereof and substitution of Thr for the 10th residue Ser (des Lys¹³[Thr¹⁰]hCS-13).

Marked up version of the paragraph starting at page 129, lines 6-11 is

below:

[SEQ ID NO:52]

The amino acid sequence of a peptide derived from the peptide having the amino acid sequence defined under SEQ ID NO:1 by deletion of four amino acids (Asp-Arg-Met-Pro) (SEQ ID NO:117) from the N terminus thereof and substitution of Lys for the 2nd residue Arg and Thr for the 10th residue Ser ([Lys², Thr¹⁰]hCS-13).

Marked up version of the paragraph starting at page 130, lines 17 is below:

[SEQ ID NO:55]

The amino acid sequence of a peptide derived from the peptide having the amino acid sequence defined under SEQ ID NO:1 by deletion of four amino acids (Asp-Arg-Met-Pro) (SEQ ID NO:117) from the N terminus thereof and one amino acid (Lys) from the C terminus thereof and substitution of Lys for the 2nd residue Arg and Thr for the 10th residue, Ser (des Lys¹³[Lys², Thr¹⁰]hCS-13).

Marked up version of the paragraph starting at page 155, line 23 to page 156, line 4 is below:

Example 3

Synthesis of human peptide hCS-17 (SEQ ID NO:1):

Asp-Arg-Met-Pro-Cys-Arg-Asn-Phe-Phe-Trp-Lys-Thr-Phe-Ser-Ser-Cys-

Lys, 1) Synthesis of Boc-Asp(OcHex)-Arg(Tos)-Met-Pro-Cys(MeBzl)-

Arg(Tos)-Asn-Phe-Phe-Trp(CHO)-Lys(Cl-Z)-Thr(Bzl)-Phe-Ser(Bzl)-

Ser(Bzl)-Cys(MeBzl)-Lys(Cl-Z)-OCH₂-PAM resin (SEQ ID NO:119)

Marked up version of the paragraph starting at page 158, lines 14-20 is below:

Marked up version of the paragraph starting at page 159, lines 14-23 is

below:

Example 5

Synthesis of deletion type human peptide hCS-13 (SEQ ID NO:3):

Cys-Arg-Asn-Phe-Phe-Trp-Lys-Thr-Phe-Ser-Ser-Cys-Lys

1) Synthesis of Boc-Cys(MeBzl)-Arg(Tos)-Asn-Phe-Phe-

Trp(CHO)-Lys(Cl-Z)-Thr(Bzl)-Phe-Ser(Bzl)-Ser(Bzl)-Cys(MeBzl)-

Lys(Cl-Z)-OCH₂-PAM resin (SEQ ID NO:121) Following the procedure of Example 3, all the necessary amino acids were introduced into the resin in the order as indicated by the sequence, to give 0.603g of the protected peptide resin.

Please substitute the Sequence Listing (pages numbered 1-31) with the substitute sheets (numbered 1-36) attached hereto, and renumber the claims and abstract accordingly.